



National Certificate of Educational Achievement
TAUMATA MĀTAURANGA Ā-MOTU KUA TĀEA

Exemplar for Internal Assessment Resource

Physical Education Level 3

Resource title: Physical Education

This exemplar supports assessment against:

Achievement Standard 90741

Appraise performance and review a programme for performance improvement for self or others

Student and grade boundary specific exemplar

The material has been gathered from student material specific to an A or B assessment resource.

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	Grade Boundary: Low Excellence
1.	<p>The student has used knowledge from other sources well throughout to add depth to answers. A wide range of practices and theories have been researched and challenged. A variety of feedback types have been evaluated with some evidence of critical evaluation in parts. Evidence is generally provided by way of 'accounts of what happened'. Specific evidence from logs would be beneficial to include. The student has an excellent understanding of the theories surrounding motor skill learning. Stages of learning are explained in detail with effectiveness in relation to skill improvement being clearly critically evaluated.</p> <p>Only one type of practice has been evaluated. Modifications for the future are suggested showing further evidence of the ability to critically evaluate. Although detail of types of practice and practice activities is lacking, there is sufficient knowledge of other motor learning principles and sports psychology included. The learner has achieved with Excellence (low).</p>

WEAKNESSES-

Getting out of a bunker still proved to be a weakness for me, even after the final performance. I wasn't able to follow the steps I had outlined in my pre appraisal. One of my main problems was the shallower swing needed to hit the sand before hitting the ball- I couldn't adapt to the change from the drive shot, as this was the shot I mostly practiced. The ball would go flat still, not being able to clear the bunker and roll back down, and I would need another shot to clear the ball. I wasn't able to do a bunker shot in the final golf performance, as my ball never landed in a bunker, mostly due to luck. However I did do some mid shots in the bunkers, and these results were no better than my pre shots. I also think I didn't keep any acceleration going through the ball, so in some respects, the attempted show was similar to a half drive in the beginning, and a half putt, where there was no follow through. I was very lucky that my ball didn't land in bunkers in my final performance. During the mid bunker shots, I also forgot that if the club-head touched the ground, there would be a one stroke penalty, which if I was in a real game situation I would have incurred penalties. I was able to correct my stance however, and bend my knees, which helped a little bit, however, I wasn't hitting the sand or angling the club upwards. I need to work on this, but the biggest barrier to hitting a successful bunker shot would be the drive-like swing. I need to make my swing steeper, and more like a v to get the ball in the air and onto the fairway. Because of the technical differences between my swing and the proper subroutine, like incorrect swing, the ball remains in the bunker, and I need to work on emulating the exemplar checklist.

TASK 3- CRITICALLY EVALUATE THE EFFECTIVENESS OF YOUR PROGRAMME IN IMPROVING YOUR PERFORMANCE

DID YOUR PERFORMANCE IMPROVEMENT PROGRAMME HELP TO DEVELOP YOUR GAME OF GOLF?

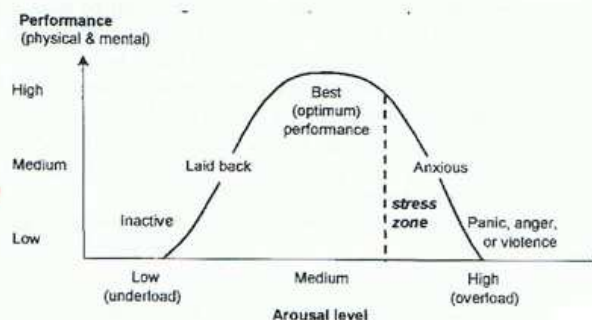
The Performance Improvement Programme I undertook for golf did not help me develop my game of golf to an achieved standard. I displayed some areas of improvement with basic subroutines within the 5 iron shot, and learned new skills within the lessons, however on the day of the final performance I wasn't able to convert any of the skills I learnt to attribute to a successful performance. There were many reasons why my programme was not effective, the main ones being motivation and arousal and. I did however improve in some parts of the golf swing, and these improvements I have attributed to feedback, past experiences and types of practice.

Motivation was the main factor in me not improving my golf game. Motivation is defined by Sage (1974) as the 'The internal mechanisms and external stimuli which arouse and direct our behaviour.' This definition has three points- it depends on the external pressures that we face, for example getting a good grade, or receiving a prize, as well as the fact that motivation concerns the intensity of behaviour. The main point for me in the definition of motivation was the inner drive to achieving a goal. I had no internal drive whatsoever in relation to golf, as I neither enjoyed it, gained any satisfaction from a good shot, or felt a sense of pride that I had done something. I had a largely negative attitude towards golf, and I saw it more as a time to socialise with friends rather than practice my technique. I also think my friends had an effect on my motivation levels- they weren't motivated either. We would often have conversations before going golfing complaining about it, and my attitude mirrored theirs. I think the degree of difficulty surrounding golf was also an off putter, as once I experienced failure, I was reluctant to try again, instead I just gave up. This is evident even in my final golf swings- on the video I attempt to hit the ball 3 times, fail and walk out of the shot so someone else could go. I had no motivation to improve in golf because of the low levels of enjoyment, but I also think the fact that I already had my scuba diving mark from a previous assessment for 3.4 also made me not try to my full potential. I knew going into golf that I would not be able to gain the necessary skills and techniques in the narrow space of time allowed for the programme to get higher than an achieved, and seeing as though I already had a merit from Scuba, trying seemed pointless.

There were some days that I regret not trying when I watched others in my class do fantastic drives, but I always came back to the same conclusion- I couldn't do it even if I tried. My lack of motivation was a real barrier to the entire performance improvement programme, as I was continually reluctant to do anything, and I would try to get out of doing it if I could.

Sports psychology was also a factor in my unsuccessful Performance Improvement Programme. Arousal can be used to help an athlete achieve optimum results. Arousal is 'the degree of preparedness, alertness and excitement present in a performer who is about to take part in a skilful activity.' -VCE Physical Education Book 2, page 510. Arousal levels

can fluctuate for many reasons, however mine never rose. The optimum level of arousal for a golfer is moderate, which is demonstrated by the inverted U diagram shown to the left. My state of arousal was firmly situated between inactive and laid back, which results to low levels of performance. I was never able to raise my arousal levels, and I was not able to minimise the negative effects that happened because of the arousal levels. Arousal levels are strongly related to motivation- if you are motivated, you are more likely to get more aroused and perform better. Characteristics of under-arousal are described in my golf logs- not focused, mistakes being made, frustration, lack of interest.



However, the small improvements I did have are contributed to the feedback I received, especially from Mrs McGregor. Feedback is all of the information that an athlete receives about the performance of a skill, either during the performance, or after. Feedback is vital for performance in a skill, especially during the beginning and novice stages of the skill learning. I received terminal feedback frequently from Mrs McGregor during the Wednesday practices. She was especially good with helping me with my stance and ball position- she showed me how to put my weight on my front foot for chip and pitch shots. Her feedback given matches the ideal 'Feedback Sandwich' model that is classed as an ideal method of giving feedback. She started with some general feedback to get my attention, by telling me my weight distribution was not correct for the shot I was doing. She then added the 'meat' to the sandwich, by telling me how to fix the problem- moving my foot forward a few centimetres and transferring the my weight onto it, so my head was over the ball. She then finished the feedback with some positive general feedback to try and motivate me. I think I felt the only faint spike of motivation and arousal when I was receiving feedback form her as I knew exactly what she meant and how I could improve. I also received external feedback from Coach Jan, the most valuable being how to make my swing more powerful and get the club parallel to the ground- she explained the benefits of the 90 degree angle and how to cock my wrist to achieve it. After that, my swing technique improved remarkably as I was able to get the club up to where it needed to be for the downswing and impact.

I also used intrinsic feedback to improve my golf performance. At times I could feel that something was not right, and the swing felt unnatural. A good example of this was when I was when I was taking one of my last swings during the 9 hole course and I was setting up my shot. I did a practice shot, and I felt straight away something was not right- I realised my stance was incorrect, and I was too far forward- I felt the muscles in my side pull as I was trying to compensate for the incorrect stance. This feedback was effective, but not as effective as the external feedback I got from instructors and teachers- Intrinsically, I knew something was wrong, but I couldn't figure out automatically what it was. The external feedback was better as I was told exactly what was wrong, how to fix it, and encouragement. I think encouragement is a necessary part of successful feedback- especially when something good is done.

My friends also contributed to the feedback that I received, especially

was watching my final golf performance, and she told me that I was too far away from the ball, which was the reason why I wasn't hitting the golf ball. She told me to stand closer to the tee, which resulted in more hits. Even though I received a lot of feedback, my performance only improved marginally. I think this is because once again of motivation- I wasn't motivated to improve, so I didn't. Even though the feedback was coming at me from all angles, I didn't take much of it on board because I didn't want to improve. However, the feedback that I did take in did help me a lot, seeing as I was a novice golfer.

Past experiences also helped me a bit in improving my golf performance. Lawn bowls came in especially handy with my putting, as I was able to judge the depth of the shots, and how hard to hit the golf ball. The skill of depth perception is one I had been taught before with Lawn Bowls and my coach, who would get me to bowl the bowls to various lengths on the green. This probably why I felt the putting was easier than the driving, as well as because of my limited muscle power and rudimentary driving technique. Some previous hockey training also effected the performance, however this both helped and hindered my skill- the same basic technique is the same, and hockey had taught me to have an eye for the ball, however the ends of a golf club and hockey stick are extremely different, and the balls behave differently when they are struck- I think in my initial attempts, I was hitting the golf ball like a hockey stick because that's all I knew what to do.

I also think motor learning strategies helped a little bit for the improvement that I did have, although they were also discouraging. I used the phases of learning strategies to help my golf performance, however it had limited effectiveness. I started the golf programme in the cognitive phase of learning. This is the initial phase in the learning process when, as a beginner faced with a new skill, you want to be spoon fed information and feedback about how to do the skill. I asked a lot of questions when I was in this phase such as 'How do I stand, why do I hold the club this way, what happens if I rotate my hips?'. I was trying to walk through the subroutines very slowly, to gain a theoretical understanding of the steps involved, and what order to do them in. The emphasis on this stage is on understanding and involvement. However, I did have some difficulties in the cognitive phase, such as selective attention. I was a little bit overwhelmed with information, and I didn't know what pieces to use and what to discard. I was also distracted by my friends talking, and I probably distracted them when they were at the tee. Because I was getting so much information, I was in overload, and as such lost the desire to process any of the motivation, because it was 'too hard' to try and figure out what to focus on. However, being in this phase meant the people giving me feedback knew what level I was on, so they knew what to try and tell me. Cognitive stages do help to prevent information that is too advanced or not yet relevant for the cognitive learner being shared, which is why I think it helped me when I was being coached. When I was trying to help myself and give myself feedback, by placing myself in the cognitive phase, I had a kind of justification for my mistakes, therefore I didn't feel as bad when I was watching them.

Eventually I moved to the Associative Phase of learning, which is the intermediate or practice part of the learning process. This phase is a lot harder to move out from than the cognitive, and I only reached the beginning parts. This is where the golfer has the theoretical knowledge, and the cognitive movements have been established, however the skills still need practicing. An indicator of the transition between cognitive and associative is the reduction in gross mistakes. Although I made mistakes frequently, the mistakes I made were not gross, for example I would have the weight on the wrong foot, or I'd be using the wrong club. Being in the associative stage severely hindered my learning as the feedback I was being given was too advanced, too technical and I found myself completely lost as to what I was supposed to do, particularly with the instructions from Coach Jan. She would give me feedback about my swing which I did not understand, like moving a finger in my grip that would affect my overall swing. I didn't like being in the associative phase because it felt too advanced for me, and although I wasn't in the cognitive phase, which I knew because when I did make a mistake, I felt the weirdness in the movements my body made.

Distributed practices were a good way of breaking up the specific skills and tasks needed for a holistic coverage of golf. Distributed practice involves breaking the session up into smaller parts, giving the athletes time to recover and more variety. Distributed practice is especially good if you are a beginner, like I was, with limited time, which I had, and is also good for continuous repetition of gross motor skills, like a golf swing. I liked the practices better when we did 15mins putting, then 15 mins chipping, then moving onto the driving. This way you didn't get as bored as you are changing the tasks frequently, initiating more interest in each one. These practices were better for my learning, as I learnt better when I wasn't bored, and the continuing variety helped with keeping me entertained.

If I was to do this assessment again, there are many things I would try to improve on and do differently to try and get a better mark, and try and motivate myself more to achieve. First of all, I would try mental preparation to try and help me with my shots. Mental preparation is vital in any sport, and can include Visualisation. Next time I would take the time and try and visualise a successful shot, by thinking about all the right techniques, the way to hit the ball, and how to finish. I would actually imagine the ball where I want it to go, for example in a drive, I would visualise the ball travelling 150m towards the hole.

I would also use self talk to try and motivate myself more. I think my biggest problem was the fact that I came into golf with a negative attitude, thinking I couldn't do it. I would tell myself I could make the shot, or I could get out of the bunker. This might improve my motivation, and help me improve my performance.

However, I don't think that I would practice more frequently, even though my attendance to practices and the time I spent on the golf outside of class was questionable. The general assumption is that 'practice makes perfect', but I think with the levels of motivation I possessed, and the way in which I approached the assignment, if I did practice any more, it would have been a waste of my time. It's a question of quality not quantity. I needed to be fully involved in the practices, and I wasn't. If I did more, they would not have been beneficial to my programme because I just would have wasted my time mucking around and not really trying. What I needed to do, and what I would do if I was to do the assessment again, would be to improve the quality of the sessions I did participate in by listening to the instructors, taking in as much feedback as I could, and wanting to improve with appropriate levels of motivation and arousal.

In saying that, I think if I did the assignment again, I would get the same mark, simply because I did not enjoy what I was doing. I never fully got the concepts of golf because I didn't want too. I could do all the things I suggested above, but I still would probably not achieve because I wouldn't want to be there. It's a fact that in life, you excel in the things you enjoy. Netball is an easier sport for me because I have a passion for it, whereas there was a definite lack of passion in golf. My ability to make improvements in golf were therefore already disadvantaged, as I had no will or passion to make them, whereas in netball, which I train for 3-4 times a week, I improve with every training, because I have a determination and the motivation to do so, so I can retain my place in my team.

I also think the assumption 'practice makes perfect' is incorrect because some times people are just born with a natural inclination to be good at something. The top athletes in the world train hard, and do everything physically possible to get the best possible marks, but you still have to have an underlying passion for your sport. Basically, I did not achieve in the golf assessment because I didn't enjoy it, and this lack of motivation and determination hindered everything I did within the assessment.

	Grade Boundary: High Merit
2.	<p>Motor learning strategies such as specific types of practice have been clearly evaluated in relation to effectiveness to improve performance. Stages of learning are clearly understood and evaluated for different aspects of performance. Specific examples have been used to support judgements.</p> <p>Explanations on the nature of skill show a good breadth of knowledge, including; types of practice, stages of learning, strategies for game improvement, feedback, practise activities and factors influencing learning. While the evaluation and subject knowledge is clear, the attempt to be critical is superficial, therefore the student has achieved at a High Merit. To achieve with excellence there would be increased evidence of critical evaluation with specific examples to justify this.</p>

Task 3

Motor learning strategies

I found it very helpful having greater knowledge of motor learning strategies, and how to apply them to my golf. I was able to incorporate them into my trainings to make them more effective and worthwhile.

According to motor learning researcher 'Knapp', a "skill is the learned ability to bring about predetermined results with maximum certainty, often with the minimum outlay of time or energy, or both."

Because golf is a discrete skill, it has a distinct beginning and end. The completed swing can be organized, and broken down into subroutines, which help to perfect each part of the swing. Having knowledge this knowledge about skills helped me as I could, apply it to my golf training.

Organization of a skill

The golf swing can be broken down into many different subroutines, such as the grip, stance, alignment, backswing etc. Gaining this knowledge helped me, as beforehand I thought of the swing as one whole movement, which made it harder for me to identify my faults, and correct them. Yet by breaking the swing into these subroutines, I was able to work on correcting each part by itself. For example, during my topswing, I would lift my front foot off the ground, which made me over rotate and become off balanced. By grounding my foot I reduced my hip rotation, and created a more stable base to hit from.

Stages of learning

There are three defined stages of learning; Cognitive, Associative, and Autonomous. Almost everybody starts out during stage one, 'The Cognitive stage', which is where the individual learns what is to be expected to perform the skill. This is done by identifying the subroutines involved in their correct sequence, and includes a large amount of demonstration and advice. In the situation of golf, we have broken down the swing onto its subroutines of grip, stance, posture and swing. We then filmed our swing, so we had video footage in which we could analyze our errors we are making by comparing them to the ideal swing technique from our booklet. This phase is usually completed in a short amount of time.

The next phase is phase 2 'The Associative phase.' After the individual has received and understood information about what is required in performing the skill, they must practice in order to become familiar with the sequence of sub routines and required timing. Demonstrations and coaching is very useful at this point for correcting errors, and refining skills. In the situation of our golf, once we had moved on from the cognitive phase, we began to practice more regularly by going to the driving range at first to, become familiar with the different subroutines involved in the golf swing, and to practice the different techniques required for the different clubs and shots. We had plenty of coaching and demonstrations from our teacher, and peers in the class who had played golf before, and so could help us to correct our errors. Phase 2 usually takes place over a long period of time, and some people may never progress from this stage.

The third and final stage is the Autonomous phase. During this phase the skill becomes much easier to accomplish, and the level of mistakes is minimal. Practice has enabled you to reach a stage where you can organize the required movements into the correct sequence and timing with more confidence, and less thinking. In our golf, people began to reach this stage when we spent more time playing on the golf course, and we could begin to think more about strategies, such as playing bunker shots, chipping the ball, and putting more spin on the ball. At this stage we began to rely less on outside instruction and demonstrations, and more on our own knowledge and experiences.

I found that applying these stages of learning to my training helped to benefit me greatly. During the first phase, I found the video footage much more useful than the written description of the ideal swing, as I could clearly see what I was doing wrong, and what I needed to do to fix it by comparing it to other images, such as seeing if our club was at horizontal during our top swing. Also this helped me to mentally picture what I needed to do when practicing as I could visualize more easily what I had to do to improve, then the understanding I would have got simply from reading. During the second phase however, I found that the advice and demonstrations we got from our peers much more helpful, as it was directed specifically to my swing, and how I could improve it, such as Sam telling me that I need to keep my head down during my swing. This is something I did sub-consciously and would not have picked up on it otherwise. Eventually I made fewer and smaller errors, and was able to recognize my errors, and make the necessary adjustments. I don't think I really reached the Autonomous phase, as, while I understood the method behind the strategies, such as chipping the ball, I had difficulties applying it myself, as I was still working on perfecting my swing (at phase 2), and so did not have the ability to organize my movements and timing of my swing without thinking about it. Attempting to do this only resulted in information overload, in which I did not find helpful at all. So trying to apply this third phase to my learning did not help me to improve my performance much.

Types of instruction

There are two types of ways to practice a skill; Massed or distributed. Massed practice is a skill may be learned continuously without any breaks, such as going to the driving range, and practicing continuously with a driver. While distributed practice is where short frequent practice sessions alternate with periods of rest. Because I was still in the early stages of learning I was not very skilled, so found that if I practiced continuously I would end up getting frustrated with myself, and would waste a lot of shots. Therefore I found applying distributed practice much more effective for me, as I wasn't that motivated to practice, and would get bored easily. This worked well, as when we went to the driving range, I could play a few shots, then I would swap over with my friend while they had a turn. This allowed me to have a break, and so I could regain my focus, and could concentrate more on my shots, meaning I got more out of my practice.

Whole or part learning is another strategy I used to develop my golf performance. Skills can be taught complete, all at once (whole learning) or be broken down into parts (part learning). For my golf swing I found both methods useful. To begin with, I found applying part learning to be better, as it meant I could concentrate on each separate part (grip, posture, backswing etc) and get the feeling for them, without

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having to worry about focusing on speed or accuracy. Once I had got a feeling for these sub routines, I then found applying whole learning to be more effective, as I could work on piecing everything together, and to improve my timing and accuracy when hitting the ball-getting a feel for the full swing. I found it helped also, if I went back to part learning every so often, to make sure I kept performing the basic skills correctly, and that I hadn't changed them when I worked on my full swing.

It was also suggested in my golfing info that we picture in our minds what we must do, before we did it. I semi did this by analyzing my swing on film, but found that when I was out playing I often did not think back to this, instead I relied on physical practice, where I would actively participate on the golf course, by practicing my shots. So I think if I were to do this again, I should work more on mental practice as evidence has suggested that a combination of both physical and mental practice makes for the most effective results.

Changes I would make if I were to do this activity again?

Some things that I would change if I were to do a golf-training program again would be to get myself my own set of clubs that were the right size for me. Because I often borrowed my set from the club itself, each session I played with different clubs, and so could not get a feel for them as easily. Also I wasn't able to have the full range of clubs available, e.g. we used a 3 wood instead of a driver, and we were missing some irons, such as 5 irons and 8 irons, so could not always use the best club for the shot. Another problem with my equipment was that my balls were pre-used, and so their quality was not as good, which could have affected the way they were played.

Another thing I would change, would be to return to the driving range more often after a few practices on the golf course, as I then understood more about the shots, and which ones that I needed to practice the most. I would be able to improve them much more easily at the range, as you can play many more shots, without the walking and waiting in between. By practicing this way, I would be able to become more familiar with using each of the clubs, and so would be prepared when I played on the course again.

A disadvantage I found was that we didn't get to do much practice on uneven territory, as the driving range provided flat, perfect conditions, and at the golf course you could only have once hit at each shot. So next time, I would try and find somewhere sloped and uneven where I could practice my chipping, and getting out of bunkers.

I would also try and go to the golf club more often, as I found that the once a week slot I was attending was not enough for me to gain maximum improvement. It is said that to progress in a skill you need to train 2-3 times a week, yet because I was only playing once a week, I stayed at the same level, and didn't improve all that much. Also attending more often I would have had a greater chance to experience more variables, such as the weather, and any awkward shots, which I might not have previously attempted.

Next time I would spend more time on putting practice, as I don't think I put enough emphasis on these shots this time round. Putting is a very important part of golf, as it accounts for around 1/3 of your total shots. I found that because they didn't require so

much of the technical side of the full swing, I was more inclined to fluke my putting, and focus solely on my swing.

Finally I think that if I had practiced more drills at home, or in a class lesson, I would have improved my swing more. But because I never assigned a time slot for myself to do these, I found that they never got done, and so because of that, my swing was not as good as I could have made it. So next time I would set aside a practice time, or perhaps a training session where I assign certain days a week for practice, so I will be more disciplined to follow them.

How understanding of the game and developing strategies helped with improved performance

Once I had learnt the basics of the golf swing, and putting, I became aware that there were many different factors that effected the game that I needed to take into consideration. Some of these factors are:

- Playing the ball from an uneven lie
- Different surfaces (the rough, green, and bunker)
- Negotiating around obstacles, such as trees and lakes.
- Adjusting the range of your swing (from full to $\frac{1}{2}$ or $\frac{3}{4}$ swing) ✓
- Putting, being able to judge distances and angles
- Speed of greens.
- Weather, such as wind direction and strength.
- Selecting the correct club needed for the shot.
- Being able to stay concentrated and calm throughout the game make every shot count

Because no golf course is flat, I was often in the position where my ball landed on a slope, which meant that my feet were lower then the ball during the address position. As a result I noticed I would move forward, closer to the ball on the downswing to try and stay balanced. This also meant my club path is moved as well and I would strike the ground behind the ball first, creating a shorter shot that would hook to my left. To correct these problems I realized that by aligning myself to the left of the target, I would make the path of my ball travel more to the right, which would help to compensate for the shots tendency to hook. I also found that by moving the ball back a bit I brought the target closer to the point of impact in my swing, which meant I would be more likely to hit the ball, then the ground in front of it.

The wind was also another factor that I had to consider. I knew from my biomechanical analysis that the golf ball was already aerodynamically designed to gain lift from its dimples. However, I found that when hitting into a head wind, my ball would often go too high, and I would not get the distance. When driving from the tee, I found that it was a good idea to lower the tee a little, so I wouldn't get under the ball as much, which meant I put less backspin on the ball, so the ball didn't travel as high. Because the ball was lower to the ground, it was less effected by the wind, and so could travel further. Another strategy I found helped when playing into a headwind was to select lower number irons with less loft angle when playing on the fairway, so the ball would travel further, not higher. Again, when playing with a tail wind I can do the opposite, as the wind will carry the ball further.

After playing my first few holes, I found that when I got close to the green, I would constantly hit my ball too far and overshoot the green. This meant that I would take up many shots trying to get play the short ball. I realized that I needed to reduce my swing from a full swing, down to a $\frac{3}{4}$ or even a $\frac{1}{2}$ swing the closer I got to the green. As this created a slightly different sub routine (with a shorter backswing and feet closer together) I found I should probably have concentrated on practicing this more often, which would greatly help to improve my score.

Feedback

A lot of my feedback that I found useful came from external feedback, where one of my class peers would give me advice and tips to improve my golf. I found this especially helpful at the beginning, when I was still trying to get the hang of the swing itself, as well as strategies such as choosing the right club for the swing. By having them there to tell me what I need to do also helped to reduce information overload, as I was able to focus solely on only a few things at a time, and correct one error at a time, such as keeping my head down during my swing, and having the correct body posture and alignment, before trying to perfect the rest of my swing.

This type of external feedback also provided me with motivation. For example, Sam might point out something I am doing wrong, such as lifting my head too early on my swing, then once I fix it and do a good shot, my performance improves, and so motivates me to try again. This also applies reinforcement of learning, as I will continue to try and do the same thing in similar situations to gain the desired result. Comments such as 'nice shot' and 'much better' also made me feel better about my swing, and made me more motivated to want to improve it more.

Another form of feedback I found useful later on in the training program was internal feedback. I found this more useful towards the end as I had gained greater knowledge and understanding about the ideal golf technique, which meant I was able to distinguish myself what felt right or wrong. For example, if I hit the ball incorrectly/not in the sweet spot I felt some jarring, which meant that my shot wasn't very smooth, and so I knew I needed to work on that aspect.

My final form of feedback I found useful was that of our video footage. By having my swing videoed for step-by-step analysis, I was able to actually see what I was doing wrong, which made me able to visualize more readily what I needed to do to improve. I found this much more useful than written and verbal feedback most of the time, as I found I related better to this method as it was more practical, and related to me individually.

Practice activities

Putting from different distances away from the hole was a drill I found improved my putting accuracy greatly. It helped me to get a feeling as to how hard I needed to putt the balls from different distances to reach the hole. This also helped me to judge how the lay of the green, and speed of them would effect how my ball traveled, so I was able to work on strategies to adapt my shots to suit the green. I managed to sink most of the balls that were close to the hole and get the longer distance ones in a close range to the hole so that I could easily sink them the next shot. A weakness was that I still wasn't very good at taking the uneven lie into consideration, as to how it would effect the path of my ball, so should try this drill on a more uneven green.

A good drill I found that worked to improve the accuracy of my full swing, was one where you lay a spare club on the ground pointing in the direction of the target, close to the ball. Then when you take a swing you are able to know whether your club is following through straight (following the intermediate target line) or whether you are still bringing your club around in a curve. I found this drill very useful, as I would often hook or slice the ball, which meant my club was not hitting the ball in the sweet spot. This drill was also good, as I could practice it almost anywhere, such as if I was out on the golf course, and found my shots kept going crooked, I could have a few practice drills before I took my shot, to correct my fault. Next time I would also do a similar drill, where you lean your head against a wall, and do your swing alongside it, as this would correct not only my impact, but also my top swing, as I should not hit the wall with my stick. This would be a more effective way to utilize my practices.

I found that doing the accuracy skills tests for putting, driving and irons was very helpful, as not only did they help to improve my shots, but also my motivation. By doing these skill tests, I was made to repeat each shot in a row, which meant I got immediate performance feedback, which I could work to adjust on the next shot, so my hits got progressively better. Also I was able to note my improvement over periods of time, which helped to motivate me to want to train, as I had proof that I was actually improving my golf, and that my practices were paying off. The only problem with this method of practice, was that it was all done in closed conditions, where my shots were not effected by outside factors, such as uneven lies, or obstacles, such as trees, lakes and bunkers. Next time I would perhaps take my shots off different lies of land, or places where I must work around such obstacles. Not only would this help to improve my range of playing shots, but also help me to learn more about understanding and applying different strategies to my shots.

Summary of other factors that have influenced performance improvement.

The availability of equipment, such as the range of golf clubs was a great enabler to my golf. Both the Warkworth golf club, and the driving range were very lenient in lending us gear to play with, which I would otherwise have been unable to get. The only downside to this is that they weren't the complete set (full range of irons etc) and we had different clubs each time, so it was hard to get a feel for the clubs. The driving range was also influenced my golf, as the lady who worked there would often come and help us, or give advice to improve our swing, which I found very useful.

A downside of the range was that it cost each time you went there, which often did not help to motivate me to want to go in my own time. Although, the golf club did not

pose this problem as much, because we were able to go as often as we liked, without paying. This was a huge enabler to improving my performance, as I was offered the equipment and facilities needed, which made practicing much more inviting.

My motivation levels also influenced my improvement. I found that some days I was really unmotivated to play golf, because I was tired, or the weather was unpleasant. Because of this I did not want to play, and this was reflected in my golf, as I would not put in my full effort, so many of my shots were wasted, or if I was on the course I would rush my shots instead of stopping to prepare and think about each swing. If I can increase my motivation levels by setting myself goals etc, I think that this will begin to have a positive impact on my golf.

Time was a major factor to influence my golf. At first I found that setting aside a period during school was good, as it meant that I would be forced to go and practice, and I wouldn't forget to go, or not get around to it which benefited my golf improvement. But I found that once we went out to the golf course it was harder to find enough time, as at times I would have to leave early for work, or other commitments, this meant that I did not often get to complete the full nine holes of our assessment, or I would get bored because completing the holes took so long. This also led to another issue of transport. Because I was only able to really practice golf either at the club or the range, I needed to organize transport to or from the place if I was not able to get there myself. This meant that at times I had to leave early, or not go at all if I wasn't able to get there, which had a negative influence on my golf.

Because I play hockey, I had some advantage in the fact that I am accustomed to using a stick to hit a ball with, which has developed my hand-eye-co-ordination, which greatly helped to make learning golf easier. Although I found it hard to adjust my hockey hit to that of the golf swing, as I am so used to a different technique. I think this is one of the reasons I found it quit hard to get the correct weight transfer right during my swing.

Finally, coaching was a major influence on my performance improvement. During class time having peers, teachers, and golf instructors available meant I was able to have quality feedback available most of the time, which greatly enabled my performance. Yet I found that if I was to go to the golf course during my own time, I would not have this range of feedback available, as it was hard to organize times when both you, and your class mates were free to go, so you could help each other, or get advice. With the exception of the driving range, which often had people there who were happy to help you. I should have utilized this factor more often, by going in my own time, where it was not necessary to have coaches from our class room, as a way to help improve my performance

Comparing my ability to improve in golf with other physical activities.

There are many factors that influence my ability to improve in golf, compared to other physical activities. Such as

- Motivation
- Concentration levels
- Visualization
- Temperament
- Level of confidence
- Coaching-quality of feedback

I found concentrating in golf for the full nine holes quite challenging. I would start off concentrating, and focusing on each shot, making them count, then by the end, I got tired of playing and would rush my shots, and not make everyone count. This made it hard for me to improve my game, as my score would always get worse as I neared the end, and I would waste my time practicing the wrong thing. Yet in hockey, I find it much easier to concentrate. Our practices are shorter, and only last an hour, as do our games. This means that I am able to concentrate better on the task, and put more into the activity. Also in hockey, it is good to become aggressive, you are able to become angry and take it out on the ball and the game which I enjoy, and find it helps, as it is a way to let off steam and frustration at your self, team or opposition. Yet in golf I found it difficult, as it was important to keep your temper, and relax-not to rush in 'jungle' This meant I often ended up getting really frustrated at myself, and with nowhere to take out this frustration, I would want to give up and stop playing, which made it hard for me to make improvements on my golf, as if I didn't want to be there, then it was a waste of time forcing myself to do it.

Because hockey is a fast paced game, I find I am often rushing what I do, especially when placed under pressure by the opposing team, which means I muck up a lot of my shots. But because golf is a much slower paced, individual game, I found I was able to take my time preparing for each swing, focusing on all the sub routines, before I hit the ball, without having pressure from other players etc. This allowed me to improve much more effectively than I would in hockey, as I was able to make each shot count and practice swinging correctly more often, which means I would begin to become used to the correct technique quicker.

My ability to improve my performance in golf was also improved much more effectively than I think I would in hockey, due to the quality of coaching and feedback. In hockey, we have only one coach between over eleven players, which means that often the coach is not able to give constant advice and feed back to individual players. Also my hockey is focused on the team working together as a group, so a lot of training time is spent working in groups, so again, coach feedback does not apply directly to an individual. In golf, I am working as an individual, so all the feedback I was given was aimed to improve me only, which meant I was able to work to improve what I needed to only, not what my group did as a whole. Also, as only one person could swing at a time, the 'coaching' from our peers or teachers could be focused on that person only, which meant the quality and amount of feedback I was receiving in golf, was much more than in other sports, so my ability to improve was increased.

Task 4: Evaluation

Motor Learning Strategies

Throughout this programme I believe I applied motor learning strategies to significantly improve my swing. However, at the same time I think I could have used them much more effectively in order to maximise the benefits of the ten-session programme.

First of all, I broke the swing down into its sub routines, analysed what was going wrong in each of these sub routines, and how this was affecting the whole swing with regards to biomechanical principles. The golf swing is a complex skill and breaking it down like this I was useful as it allowed me to isolate what I needed to work on. I then designed my training programme around the certain sub routines I needed to work on. There is evidence of this in my session plans where the first two sessions were focused only on grip and stance, the third and forth sessions only on the down swing, and the fifth and sixth only on the wrist cock. Because the golf swing is a complex skill, made up of many components, it is hard to concentrate on more than one of these components at the same time. If I was to focus on grip, stance, down swing and wrist cocking in all of the first six sessions I don't think I would have made any real improvements at all. Therefore my consideration of sub routines helped me improve my performance.

While I worked on each of these sub routines one at a time, how I worked on them is also important. While focusing on each sub routine I didn't necessarily just perform this sub routine. For example when working on the grip and stance I didn't just stand there with my new grip and new stance, I performed the whole golf swing with my new stance and grip. The exception of this was when I was focusing on my down swing I used a drill which involved stopping at the top of my back swing and isolating my downswing. This was effective as it allowed me to train a specific desired aspect of my downswing (sequential timing). Apart from this drill however, I practised the golf swing as a whole. Perhaps if I had considered isolating the sub routines in training more than I did, I would have been able to focus on them better and achieve larger improvements. Although at the same time it is hard to focus on things such as the timing of the wrist cock in isolation as in order to get a feel for the timing it must be in the context of a whole swing. However I could have spent more time researching relevant drills and it is fair to say I didn't consider the isolating of sub routines in any real depth. Something I probably should have done to in order to make bigger gains.

Another motor learning aspect I considered but didn't really utilise was the phase of learning I was in. I identified early on that I was in the associative phase of learning for my golf swing but never really used this knowledge at any stage. As a result this knowledge didn't aid in improving my swing at all and it is an area where I failed to apply motor learning strategies to improve my swing. If I had considered it in any real depth I could have discovered whether or not it was a good idea to isolate sub routines at this stage in my training. While I think my consideration of sub routines helped my improvement I think the lack of understanding I had over how to apply my phase of

learning is an example of the areas of motor learning I failed to consider. If I had looked deeper into these areas I could have made bigger improvements in my swing.

Feedback

At the start of this assignment, I researched types of feedback on the Wellington College intranet and decided which ones would be suitable to use in my sessions. I decided the following would types of feedback would be useful:

- Terminal external knowledge of results
- Terminal external knowledge of performance
- Internal knowledge of performance

The word terminal expresses the fact the feedback is given after the performance and external means it comes from and source other than me. (Internal is from my own muscle receptors etc). Knowledge of results basically means knowledge of what happened to the ball and knowledge of performance is knowledge of how the skill was performed. In more basic terms, the three types of feedback I decided I would use would be the feedback I got from my own body during the swing (internal), the knowledge of what happened to the ball, and lastly the feedback from a friend on how I performed.

I later realised that instead of getting a mate to watch me while I performed the skill, I should have used a video camera. This would have provided better feedback (terminal external knowledge of performance) than what my mates were giving me, (they only roughly knew what I was working on). If I had taken video footage I could have analysed whether or not I was achieving what I wanted and hence whether or not I needed to alter my training. I believe if I had done this, my swing would have ultimately benefited from the extra information that the camera provides. But sadly I didn't.

The other two forms of feedback I used were much more valuable. However they relied on each other in order to be useful. By comparing the difference in where the ball went to the difference in feeling between two performances I could figure out what my swing should feel like, as well as assessing whether my changes were working. The knowledge of results (where the ball went) was useless on its own. Just because I saw the ball slice didn't mean I could fix it. But if I sliced one shot and hit the next well, I could assess the difference by internal feedback and endeavour to replicate it. Overall I think I did this well and as a result I think improvements were definitely made. This is reflected by the fact that in most of my sessions I was hitting the ball much sweeter at the end of the session.

Practise activities

This is area where I definitely think I did better than most in our class. My ten session training programme consisted of a lot of repetition but each activity had a specific aim. There were three activities that I did use which I believe improved my swing. These activities were found on the Internet and were made up by professionals. I simply researched them and deemed them applicable and relevant to my programme.

The first drill I used involved freezing at the very top of the back swing for a period of time before activating the down swing. The key here was to focus on which body

parts were activated (and when) in the down swing. As mentioned in task one, if the bigger body parts that are closer to the centre of mass are activated the earliest then the summation of forces will be maximised. This drill is useful as when you freeze and prepare for the down swing you are able to focus on leading from the lower muscles. As my swing was so heavily dominated by my shoulders and arms coming though early this activity was very good for me personally. As a result I now produce more power and my arms don't produce the same slice as they were. It is however quite an awkward exercise and because of this I was very unhappy with it after the first session of using it. However after noticing the improvements I changed my mind and after the second session I was happy.

The second activity I used was a more flowing drill designed to loosen the wrists and find the ideal timing of the wrist cock (and un-cock). It involved starting the club head a foot in front of the ball, gripping the club so high up that half the top hand is off the club, and swinging in one fluid motion. The focus here was the timing of the releasing of the wrists which I could alter depending on the results I was producing. A slight change in the timing led to a massive change in where the ball went, which was down to the way the wrist affect the angle of the club head. I found that by un-cocking my wrists earlier in my down swing the clubface would come through squarer and therefore my slice became less prominent. (This is due to reasons explained in task one). The problem here was that I got too carried away and changed it a little too much, which means I now have a tendency to hook it.

The last major practise drill I used was also designed to help find the ideal timing of the wrists. It was carried out by basically just taking the top (left) hand off the club altogether. With the right hand performing the whole swing on its own, I got a feel for the proper role of my right wrist. Originally my forceful lead (left) hand was overpowering my right wrist, (a trait I get from cricket), but this drill helped me aid this. I believe it was a useful activity because along with the previous drill it helped me find the appropriate wrist timing and hence the appropriate angle of the clubface going through impact.

Overall I believe these three drills helped my swing a great deal as they did what they were designed to do and ultimately this was reflected in the shots I was playing towards the end of the programme. However I believe this was lucky. While I spent time researching activities on the Internet, in the end they were just drills off a website which obviously means they are less than reliable. I am happy with the results they produced but I think I could have come up with a more comprehensive programme by seeking more reliable advice.

Other

Another factor to consider in the evaluation of my programme is the lack of a coach. The fact is I designed this whole training programme myself, simply from notes and websites. As mentioned in the above paragraph I should have at least checked with someone that I was heading in the right direction. An expert could have sat down with me and pointed out the areas I most needed to work on. In reality however I just guessed. With my biomechanics knowledge, and basic golf and sport knowledge along with research they were educated guesses of course, but they were still guesses. I have had no real training in the area of golf and have no doubt that if I had seek

more advice I would have come up with a better programme. That is not to say I wasn't happy with my programme, I was, just that it could have been much better.

The practicality of carrying out a golf programme during class time affected my ability to complete the training sessions properly. While I pretty much finished all of them, some were very forced because of the fact we trained in Petone and had to get there and back within the period as well (almost). This generally meant that a lot of my sessions fell away towards the end as I rushed to get my moneys worth and hit all the balls. Looking back I should have either found a way to have more time for the session or hit less balls, because I was hitting so quickly at the end of sessions that I left little time to focus. This meant the sessions became useless for the last ten or so balls and hence my training was not optimised.

Overall Success

Considering I have had no real golf training in my life, I am stoked with the effectiveness of my programme. Sure, I should have consulted a coach, given myself more time, and considered things such as motor learning strategies better. But at the end of the day my slice has improved a great deal and I am creating more power. Basically I am hitting the ball straighter and harder and to pull out an old cliché, the proof is in the pudding.

I believe I considered biomechanical principles and applied them effectively and this was hugely beneficial in terms of improving my swing. The key areas that made the difference in my eyes were:

- The new grip
- The improved sequential timing of the body
- The improved sequential timing of the wrists

This is because I believe they lead to the improvement of the angle of the clubface at impact. This aided the slice and meant the ball went further. On the other hand the biggest negative contributing factor I perceive is the fact I didn't consult an expert to critique my programme.

This leads me to my next point. If I were to do this assignment again, I would definitely go to see an expert. Even if it was only to show them a quick video of my swing and a quick discussion I think it would have been very valuable. The benefits of this are discussed above but in basic terms my knowledge is obviously not comprehensive enough to be thoroughly confident in my programme.

Over the course of this assignment I have looked at biomechanical principles in a lot of depth and my knowledge in this area has improved a great deal. As a result of this I believe I am better positioned to analyse more of my sporting endeavours. I am not going to pretend I am an expert of any sort but I now have the knowledge to look at my other sports more critically. For example cricket, a sport I take seriously, is similar to golf in the way it is a ball striking sport and I believe many of the same principles from the golf swing can be applied to my cricket technique. Although I have already worked very hard on my cricket and am not going to make any big changes any time soon, I now have a broader knowledge of the principles. This applies to more sports than just cricket and golf of course and I move forward with a more analytical approach to sport.

	Grade Boundary: Low Merit
3.	<p>Motor learning strategies such as specific types of practice have been clearly evaluated in relation to effectiveness to improve performance. Stages of learning are clearly understood and evaluated for different aspects of performance. Specific examples have been used to support judgements.</p> <p>Explanations on the nature of skill show a good breadth of knowledge and use of knowledge from other sources but have not been related to own performance improvement programme.</p> <p>Practice activities and feedback lack detail in comparison to previous sections. Some evaluations are made however judgements in relation to improving performance should be clearer, with specific examples. Other factors effecting performance improvement have been acknowledged. Holistic judgement suggests the student has achieved with Merit (low). This sample would be strengthened by clearer links to performance improvements in some answers and consistent use of valid specific examples.</p>

golf course before, and it was a lot different to the driving range so I needed to have this experience so I had an idea of what to expect in the final assessment at Pakuranga Golf Course. We also played a game of Ambros at this course which was an interesting and fun way to play a round of golf. It was motivating and encouraging as you worked in team, and played from the best persons shot each time. This was a good way to avoid frustration in the cognitive stage of learning because we were often inconsistent and if we had a bad shot we did not get disadvantaged, or feel too far behind the group.

Feedback

Feedback is all the information that an athlete receives about the performance of a skill, either during the performance (continuous feedback) or afterwards (terminal feedback), (VCE Physical Education, Book 1, 2000). Feedback is useful as a motivator, to help make immediate performance changes and to reinforce learning. External feedback was important for improving my golf skills as this is feedback provided by visual and auditory cues. This was helpful as I could see where my ball went, how far it travelled and in what direction. From this I decided what to focus on in my next shot and where I should be aiming, to either repeat the shot, or alter it in order to improve on it. Positive feedback was also a very important factor as it was the encouragement from friends in my class and the teachers and coaches that helped me to continue. Because I was not very good at golf, or confident with my performance I felt like I needed a lot of positive feedback, rather than the negative thoughts that I often had when my shot did not go very well, or when I was continuously miss hitting the ball. Knowledge of results was also important as Coach was able to watch my performance and offer me instant feedback and advice. This was encouraging and also beneficial to my performance as she could watch what I was doing, explain what was wrong and tell me what I needed to do to improve it.

Summary of factors that have influenced my performance improvement

Many factors influenced my performance improvement in golf. I feel I lacked motivation in this unit as I had already passed the Aquathon and Scuba-Diving component, and therefore felt I didn't need to rely on it. This meant I did not pay enough attention in the golf lessons, and that I was also lacking the motivation to achieve a good mark as I had already secured this previously. Another factor would be that golf is not a preferred sport of mine and I held little experience and interest for it. The positive factors that improved my performance was having a coach who knew what they were talking about and who was able to show accurate and helpful demonstrations. Attending golf sessions with friends also helped to increase motivation and decrease boredom as we could work together, and many of us were of similar abilities. As I began to improve my golf skills, I did realise that my interest in the sport was increasing – something that I didn't think would happen. Another factor that influenced my golf performance was how long the unit was carried out for. I understand that it requires a reasonable period of time to improve golf performance, but as the unit continued, and became even longer due to weather complications, I lost more interest and was looking forward to it being over.

My ability to improve my performance was hindered by the fact that I had a mindset prior to beginning golf that I did not, and would not enjoy the sport. Because of this negative attitude my improvements lacked as it is hard to put the effort in and remain motivated when participating in a sport you have convinced yourself you do not enjoy. I should not of come into the unit with these negative attitudes, instead I should of had an open mind and seen how far that would of got me. Compared to improving my skill performance in a sport that I prefer such as netball, I was at a disadvantage. My skills in netball would improve vastly in comparison as I would be motivated and applying myself to the sport. Practice is more successful and improvements are a lot faster when you are enjoying the activity you are participating in. Also having no background in golf, in comparison to a sport that I already have experience with hindered my ability to improve as I had to start from scratch rather than having a base knowledge to work with.

Task 3

Critically evaluate the effectiveness of your programme in improving your performance

Did your performance improvement programme help to develop your game of golf?

Motor Learning Strategies

Types of Practice

The more practice you do, the more your performance will improve, although the practice must be completed correctly otherwise bad habits will be formed or your performance can be negatively affected. There are a number of types of practices that can be used to improve performance in a sport or specific skill. Each type of practice takes into account the athlete's skill level, past experience, specificity of practice, fatigue and motivation. Practice can be classified into four main types; massed and distributed practice, whole and part practice, drill and problem solving and mental and physical practice. To avoid fatigue practice must be of an appropriate length and frequency, and include rest periods. To help increase motivation during practice, activities should be varied and be suited to the learners ability, as they are more likely to improve if they are enthusiastic about the practice session.

In learning the fundamentals of golf we used a combination of these types of practice. The most common type of practice used was distributed practice. This type of practice consists of short, frequent practice sessions interspersed with intervals of rest or intervals of learning another skill. An example of this type of practice was, the 12th of March when we had our first session of golf. It was half a day spent at The Big Swing Driving Range. Because we went through pitching, chipping and driving in the same session, and alternated between these, including periods of rest it is distributed practice. As I was very new to golf, I found this type of practice to be beneficial. I had enough time to try the skill, and receive feedback, but was able to move onto a new skill shortly. Because I was not good at the skills to begin with, being able to move on to something different ensured that I did not get frustrated with my performance if I felt like I wasn't getting anywhere. This type of practice also helped to motivate me, as I knew we would be moving onto something different shortly and this helped to decrease boredom. Distributed practice is better used for complex skills that require precision. This is another reason why it was appropriate for learning the golf swing as the swing is technical and requires a lot of focus, particularly in the cognitive stage of learning, where mistakes are commonly made. A mixture of whole practice and part practice was used in learning the golf swing. Although we completed the full swing in each practice, we did have the swing broken down into parts. Creating a subroutine was particularly helpful when I was struggling. I found this beneficial for my learning as I needed to understand the set up, before I could focus on my backswing, point of impact and follow through. For example at the Big Swing Driving Range on the 16th of May, I had my grip incorrect and was not cocking my wrists correctly, leaving me with a sore right hand. In order to fix this Coach [redacted] was able to go over my grip with me until I had that correct and then slowly incorporate the backswing. First I made sure my grip was correct and then performed the backswing just to my knees, then to my hips, then to shoulder height as my skill level increased. Another helpful subroutine was taught to my group by Coach [redacted] during the school holidays when we played a few holes at the Firmount golf course. "Jan taught up to remember our pre-shot routine as SPAG. Set up, practice swing, aim and GO!" (2nd May). This was helpful as it helped me to concentrate before my shot, as I was often unfocused when preparing for my shot due to having my friends around me. If I was to go through this again I would incorporate mental practice into my programme. Evidence suggests that combining mental and physical practice is the most effective way of learning. Mental practice would also allow me to visualise my golf performance in my own time, without requiring my own set of golf clubs.

Stages of Learning

When I began learning the fundamentals of golf, I was definitely in the cognitive phase of learning. The cognitive phase is the initial phase in the learning process, when a beginner is faced with a new skill or set of skills to learn. Because I had no experience with golf and I needed to learn what was required of me, what the basic rules were, and how to hold a golf club correctly. I received demonstrations from others in the class who had more experience with golf, and from Coach [redacted] and Coach [redacted]. As I was new to the sport, I made a lot of errors and often had uncoordinated movements. During the cognitive stage I needed clear and simple guidance, and at times Coach [redacted] had to physically manipulate my arms in order to get my body into the

correct position. Evidence: 16th of May, "Coach had to move my arms for me, so I could feel the position I was meant to be in for my backswing".

The length of the cognitive phase is relatively short, although this depends on how much practice is done. Because I did not practice outside of scheduled class time, this would have hindered my improvement. Before the school holidays, I was feeling a lot more confident with the levels of my skills, and was making progress towards the next stage of learning. When I returned to golf after the holidays, where I did not practice, I noticed that I had fallen back into the cognitive stage. On completing the golf practical sessions I have definitely progressed and I am sitting between the cognitive and associative stage. The associative phase is the intermediate or practice phase in the learning process. This phase is generally longer than the cognitive stage as the learner is now required to take part in many hours of practice in order to minimise error and become more consistent. In some skills, for example the chip shot, I feel confident performing the skill and understand what I need to do and what is required of me; therefore I am in the associative stage. For other skills, such as the drive, I am still in the cognitive stage as I am not consistent and still need guidance in getting my body in the correct position. I have not moved in the autonomous stage of learning for any aspect of my golf play - this is the final stage where the learner is able to perform the skills almost automatically; easily and without stress.

Nature of Skill

Muscular Effort

Muscular effort describes the force exerted by the muscles involved.

There are two types of these skills; fine motor skills and gross motor skills. The problem with this classification is that fine and gross motor skills are often combined in sporting contexts, making it difficult to define where each lies. The skill of hitting a golf ball is a gross motor skill as a great amount of force is exerted by the larger muscle groups in the upper body. Smooth co-ordination is also needed to achieve maximum power. Although, the skill can also be defined as a fine motor skill as a small amount of force is exerted through the smaller muscles in the hands to complete the swing, and certain shots, such as putting involve more precise and delicate movement.

Types of Movement

Types of movement can be divided into three categories, although once again it can be unclear to classify a skill as it is difficult to determine exactly where a skill begins and ends. The golf swing is a discrete skill as it is a single movement with a distinct start and finish. The swing begins with the set up, which remains fairly consistent with all stages of the game of golf. The swing moves through the stages of backswing, downswing, impact, follow through and ends with a hold for the finish position.

Environment

The physical environment and the conditions a skill is being performed under is a large factor in determining - the complexity of the skill. This is measured on the Open-Closed Continuum, where most skills lie somewhere in the middle as it is difficult to define one way or the other. The game of golf lies between a closed skill and an open skill. This is because golf can be classified as a closed skill as the player decides when and how to initiate the action. The player is also able to plan what to do and when to do it, because the demands and requirements of golf are generally known and can be practised. The movement pattern of the skill can also be repeated as it remains similar regardless of whether the shot is a drive, chip or pitch. The game of golf can also be classified as an open skill as it has the possibility to be played in an unstable and unpredictable environment, due to the golf course being outside. A golf player is often in a dynamic position as the swing requires movement throughout the whole body.

Practice Activities

Activities – on the 23rd of May at the Big Swing Driving Range we were encouraged to work on our speed, distance and accuracy by involving us all in a motivating activity. The task was to hit the target in the driving range three times, in order to win a pair of shoes. This helped because although I was not very good in the driving range it made the task more interesting and I had a reason to keep trying and not to give up. It was also beneficial to watch other classmates perform the task as some students already had a wealth of golf knowledge that was able to help me with my performance.

Drills – the putting drill that was taught to my group by on the 4th of July was beneficial in improving my short game and increasing my confidence levels. Because I was able to complete this drill well it made me feel good about myself, as usually I struggled through many of the other skills, such as driving.

Games – In the May school holidays, on Friday the 2nd, a group of us went to Firmount's 9 hole golf course to play a few holes and to get experience on a real course. This was beneficial as the holes at Firmount are not too long, and I managed to get my ball on the green without too much difficulty. I had never played on a real

	Grade Boundary: Low Achieved
4.	There is sufficient evidence that the student has explained, with supporting evidence, the effectiveness of the programme to improve performance. There are aspects of relevant knowledge including; motor learning strategies, feedback, practice activities. These have some basic examples from the programme. This sample is judged as a low achieved . To be a clearer achieve explanations and subject knowledge should be clearer.

Task Four

Motor Learning Strategies

The skill of the golf swing is Gross, Closed and discrete. It is gross as it involves large muscle groups, the legs, core, chest, shoulders and upper arms. It is closed as the athlete has complete control over the timing of the sequence; this is because there are no completely unpredictable external factors. The skill is discrete as it has a definite start and finish point.

Before I began this achievement standard I had little to no experience in performing the golf swing therefore I was in the cognitive stage of learning. This stage requires the learner to receive pieces of information from more experienced sources. As I was unused to this sort of skill there were obviously a large amount of errors in my training. I had to devise a training programme that took into account my stage of learning. Due to the skills gross nature I decided to use distributed practice, this allowed me to take rests in between 'bouts' of effort. This was also helpful as my muscles were unfamiliar to the actions required by the skill and were therefore weaker than a skilled golfer. In my training programme I decided to use Whole/Part learning. Each session I decided to have specific focus and I would work specifically on that area while performing the whole swing. I found this particularly useful as it allowed me to get used to the movement of the golf swing while specifically focusing on a minor sub-skill. For example in sessions one and two I had a specific focus on my grip. I believe that this combination of motor learning techniques was effective for me as I had had so little experience at golf before, and this programme set up allowed me to gain a good grasp on several of the smaller skills as well as allowing me to practice the whole golf swing.

Feedback

The feedback I received throughout my training programme was both continuous and discrete. The continuous feedback was from my own internal knowledge of results, for example I would know via where the ball went whether I was hitting the ball right or not. The discrete feedback (provided after the execution of the skill) was provided from external sources. Most of the time it was another student in the driving range giving me tips based on what he knew. During one of the sessions the driving range professional offered me some of his advice for free. This was extremely helpful for my swing and I immediately saw results. The other type of feedback was the use of the Professional video on Silicon Coach. Through the use of this and the checklist on the comparison document, I was able to pinpoint areas that I needed to work on. The problem I found with the feedback was that 'internally' I found it hard to assess which areas needed more immediate attention and what areas were easier to fix. When giving myself feedback I tried to remember that it should be prescriptive (identify and solves the problem) and it should address the faults which are easiest to change at first. Once I had decided what areas I should

work on first, internal feedback was very helpful in aiding my improvement. I found that external was invaluable in its benefit to me.

Practiced Activities

Stretching

I believe that flexibility is one of the most important components of fitness in a golf swing. This is because a wide range of motion is required to generate such a large force. Also, because such a large force is generated the muscles need to be ready to absorb impact. This is why I attempted to have a stretching programme to increase my range of motion. I was planning on targeting my back, shoulders and hip flexibility. Due to other commitments and general lack of interest I didn't complete this training activity. Due to this it did not improve my performance but I do believe it definitely would have.

Swings without ball

I used swings with out the ball so that I could slow down my swing and really concentrate on the specific area that I was working on in the particular training session. For example, one session I worked on my hip rotation on my down swing. At the start of the session I did 20 slow swings emphasizing the rotation of my hips. This helped to create a neuro-muscular pathway so that when it came to the actual swing the movement was 'engraved' in my mind and I would be able to perform it easier. I feel this activity was very helpful in the scheme of my improvement.

Full swings with ball

I practiced my golf swing with a ball as it is always a good idea to practice a skill in the form and setting that it is going to be used in. It was very helpful as the trajectory of the ball was a very good indication as to what I was doing wrong, or if I was actually improving. Performing the skill at top speed was also very helpful for the neuro muscular pathways to develop. This is because I was actually practicing the skill that I was assessing myself on, and the more I practiced a correct technique the more consistently I performed

Other

I have never really had a huge interest in golf, and my lack of experience and skill definitely contributed to this feeling of un-interest. Due to this feeling I didn't complete my sessions as enthusiastically or as efficiently as I would have hoped to. This definitely would have had an impact on the overall outcome of my training programme.

Overall Success

I believe that overall my programme had the potential to go very well. Considering my original cognitive stage of learning at the outset of my programme I believe that I am now at the associative stage of learning for the golf swing, that is that I have fewer mistakes and can correct myself when I do make a mistake. I feel that this is due to the structure of my sessions. The

mixture of Whole/Part learning with distributed practice worked quite well. As I could receive very targeted external feedback from a peer or other source while I was resting in between sets of effort.

I believe that it was this external feedback that was the most effective in the success of my training programme. I was able to get told from people who have a lot of knowledge about the golf swing and their advice was invaluable to me. I was able to use this very practical advice and apply it to my own swing; I feel that I saw results instantly.

The one weakness I found that I did have was my consistency to complete sessions properly. This was probably brought on by my lack of interest in the chosen skill. It resulted in me not having the motivation that is required to complete such a programme.

As I neared the end of the programme I realised that golf wasn't actually as boring as I had assumed it would be, and my interest levels rose. If I were to complete this process again I would try to use these interest levels to have a more consistent more motivated approach to each session. I would also try to use more external sources for advice on my swing, I did use www.golf.about.com, and a couple of textbooks but I failed to use them as effectively as I could have. A wider range of knowledge on the golf swing would have allowed me to experiment a bit more with my swing and training programmes, possibly making my sessions more interesting and also possibly improving my swing by more than I did with limited resources.

This assignment was extremely helpful, both specifically for my golf swing and generally if I were to apply this to any other skill that I may wish to work on the future. In 6th form it was good to learn the theory behind all of these techniques and stages, but to actually use them consciously in practice has even further helped me to learn them. It has also helped me to learn what methods of learning are effective in what situations, and what types of learners require different types of learning techniques.

	Grade Boundary: High Not Achieved
5.	<p>There is insufficient evidence that the student has explained, with supporting evidence, the effectiveness of the programme to improve performance. Explained knowledge is not always coherent. Only the cognitive phase of learning is discussed and is more an account of what happened. Types of practice have not been included. Feedback is briefly described. The effect of practice activities is identified as improving chipping but no detail is given to explaining the activities used and why or how they were effective. All sections of work require greater links to whether they enabled performance to improve or not. Specific supporting evidence has not been used. The learner has therefore Not Achieved the standard.</p>

going to the golf club myself or going with other people and doing the swings and that at home, also when we had the practices at school I had missed a few causing me catch up or do it in my own time so that I could do well in golf. But even though I still needed more practise when it came to the day I did Ok a lot of mistakes but I also could have focused more on putting because I think that may have also let me down as I didn't do much putting but did a lot more of the chipping, drive and other things. So yes there was still a lot more for me to do in golf and to fix up on.

Tasks 3 critically evaluate the effectiveness of your programme in improving your performance?

Motor learning strategies: I think at first I would have been at the Cognitive Phase because I was faced with a new skill not knowing how to do it and being told what I needed to know. At first we were being introduced to golf and what things to look at and what clubs are used for what and how to hold the club and what names there were for the clubs and what instructors wanted us to get or learn from it. It started off with a power? and then slowly beginning to realise what is what and to work on it, we were also being demonstrated things that may be familiar to us but we just didn't know how to do it yet, then we were getting verbal help, and then from there being able to practice them ask questions about it and what could be improved on. At first some of us didn't know what to do therefore causing us to make errors and lots of them to. Then as we practised at school and at the first tee some of us were starting to get a bit good but still making errors along the way but learning from that and making sure I do it right the next time. So asking for some feedback on what needs to be fixed and just being able to realise mistakes as I go.

I think it did help at times but then I got to a help where I only asked for help when needed and I didn't really practise in my own time which I should have there fore causing me to make mistakes through the assessment and trying to focus a lot on passing.

If I was to do this again I guess get out there more and practise a lot more harder because I know this was one of the reasons that made me fail cause I didn't do enough and I should have been doing it at least 2-3 a week, so if I had practised a bit more I reckon I could have passed.

My understanding of the game was Ok I knew that there were a few things that I didn't know and did know but I guess if I had asked more questions I think I would understand it a lot more but I'm not sure if it will help with my performance.

Feedback:

The type of feedback I used was the terminal feedback meaning that I was always asking questions after the skill had been performed already, this happened when we were at the first tee and I would always wait for the skill to be done first and then ask about after they had finished showing the skill. But I think the most effective feedback would have to be the continuous and the positive feedback, positive feedback would have been when we were at the golf course and we had Coach, as an assessor and right through the whole game she was always giving as positive feedback saying "nice try, well done which helped a lot also the continuous feedback giving to us right from the time we started golf up to our assessment day. See Golf Logs For some examples.

Practice activities:

The activities, practices, drills, games that were used to help improve my performance did help out because I didn't know how to chip properly and doing these did help on the assessment day, at times we did go over the same things now and then but it was really good because it taught me how to apply certain amount of force when hitting and to give me a chance to ask questions that I may not know about and learn from my mistakes.

What I would do differently if I were to do this again is that I guess have some more obstacles to go over and to be able to have some more activities if we could.

Summary of factors that have influenced performance improvement:

I think overall the amount of performance improvement I have achieved is Ok, I mean there are still a few things I could have done better to pass but then again I really didn't do much practices causing me to fail and not be here when we did get practices so for my performance I would have to say that it really wasn't that good at all, and that I still think I may have passed if I had put my mind to it.

I think my ability to make improvements was there but I guess I just didn't want to or I couldn't be bothered but at least I could have gone to a golfing range and practiced there so at least I knew what I was doing, but I think if this were another physical activity I reckon I would have done better and been able to pass but I guess golf is just one of those sports you have to be patient with.

Give specific examples / evidence.